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SOME ADDITIONS TO THE FLORA OF TEXAS—IV

Donovan S. Correll

As work progresses on a Manual of the vascular plants of Texas, which Marshall C. Johnston and I are engaged in preparing, additions to the flora of the state are being continually found as evidenced by those reported here and which have been reported elsewhere. (Some Additions and Corrections to the Flora of Texas. Wrightia 3:126–140. 1965; Some Additions and Corrections to the Flora of Texas—II. Brittonia 18:306–310. 1966; and —III. Rhodora 68:420–428. 1966). This project is being supported, in part, by a grant from National Science Foundation (GB-3138). All of the specimens cited, unless otherwise noted, are in the Lundell Herbarium (LL) of Texas Research Foundation. I wish to acknowledge the help of my wife, Helen B. Correll, in the preparation of this paper.

Setcreasea leiandra (Torr.) Pilg. var. **glandulosa** Correll, var. nov. Planta var. *leiandrae* similis; pedicelli cum pilis brevibus glanduliferis vice villorum nitidorum.

Those plants that are found about Capote Falls and along Capote Creek in Presidio Co. and have short glandular hairs on their pedicels instead of the characteristic long silky hairs are referred to this variety.

Presidio Co., on ledges of cliffs above Capote Falls, in clumps, perennial, Nov. 3, 1966, *D. S. Correll 34128* (holotype, LL); Capote Creek, Sept. (Oct.) 1883, *V. Havard* 79 (GH, US).

Nolina arenicola Correll, sp. nov. Caulis florifer ad 1 m altus (inflorescentia includenti); folia numerosa caespitem magnum formantia, circa 1.3 m longa, 5 mm lata, complanata vel cancavo-convexa, marginibus rasilibus; panicula composita, aliquantum aperta, ramis grossis effusis vel patulo-ascendentibus; rami cum ramulis curtis; bracteae non conspicuae, plerumque ramos primarios fere aequantes vel leviter superantes; perianthium 2.5–3.5 mm longum, segmentis ovato-ellipticis; fructus 4–7 mm lati, cum incisura profunda ad apicem; stylus prominens; pedicelli fructiferi 5–7 mm longi, prope basim articulati in fruc-

tus dilatati, cum cristis prominentibus sub fructibus; semina 4–6 mm diametro.

Flowering stem up to 1 m high (including the inflorescence); leaves numerous to form a large clump, about 1.3 m long and 5 mm wide, flat or concave-convex, with smooth margins; panicle compound, rather open with coarse spreading or spreading-ascending branches, the branches with short stubby branchlets; bracts not conspicuous, mostly about equal to or only slightly exceeding the primary branches; perianth 2.5–3.5 mm long, the segments ovate-elliptic; fruits 4–7 mm wide, deeply notched at apex, the style prominent; fruiting pedicels 5–7 mm long, articulate near base, dilated into the fruit, with prominent ridges just under the fruits; seeds 4–6 mm. in diameter.

Culberson Co., in dunes, 18 miles east of Van Horn, on route U.S. #80, July 24, 1957, *D. S. Correll & I. M. Johnston 18445* (holotype, LL); sandy plain, scrub land, 17 miles east of Van Horn, scape 3 ft. tall, plants forming a large bunch, July 30, 1958, *D. S. Correll & I. M. Johnston 20360*.

This species is most closely allied to *N. texana* S. Wats. It is, however, a much coarser plant than that species. Its coarsely branched open panicle resembles that of *N. erumpens* (Torr.) S. Wats. but the long pedicels and smooth-margined leaves readily separate it from that species. This species seems to occur only in sandy instead of the usually rocky or clayey soils of most of our species.

Nolina micrantha I. M. Johnst., Jour. Arn. Arb. 24: 91. 1943. Culberson Co., on rocky slopes near Pine Springs, Guadalupe Mts., inflorescence shorter than the leaves, July 25, 1957, *D. S. Correll & I. M. Johnston 18473;* same locality and date, male plant, *D. S. Correll & I. M. Johnston 18518;* on limestone hill, off highway #62, near Frijole, Guadalupe foothills, acaulescent, inflorescence pinkish, Aug. 8, 1945, *C. L. Lundell & Amelia A. Lundell 14372*. Hudspeth Co., on Keeling's Ranch, Sierra Diablo, 12 miles north of Allamore, in clumps, grasslands, June 9, 1964, *D. S. Correll, H. S. Gentry, & Craig Hanson 29769, 29774*.

This northern Mexican species is new to Texas and the United States. The slenderly dissected and somewhat twiggy inflorescence, slender short pedicels, and the typically purplish or reddish purple tinged main rachis, branches and branchlets, and bracts are distinguishing characteristics of this species. It is quite different from any other species that we have in Texas.

Yucca carnerosana (Trel.) McKelvey, Yuccas Southw. U. S. 1:24, *pls.* 6 and 7. 1938.

Culberson Co., McKittrick Canyon, Guadalupe Mts., a few plants scattered on sides of canyon, distinguished by their trunks covered with reflexed leaves, no flowers seen, July 25, 1957, *D. S. Correll & I. M. Johnston 18497;* south fork of McKittrick Canyon, Guadalupe Mts.,

tall multi-trunked plant with showy heads of white flowers, up to 15 ft. tall, Apr. 20, 1962, *D. S. Correll & E. C. Ogden 25057*.

In 1938, McKelvey gave the area of distribution of this species in the United States as, "Confined to Brewster Co., Texas, where it extends from the mountainous regions about Boquillas on the Rio Grande northward to slightly beyond Persimmon Gap in the Santiago Mts." Webber (in Yuccas of the S. W., U.S.D.A. Agr. Mon. No. 17:18. 1953) did not enlarge the range of this species given by McKelvey. Apparently it has never been reported outside of Brewster County in the United States. Its locality about and just below the mouth of McKittrick Canyon is only a few miles from New Mexico. It is surprising that so spectacular a plant as this escaped notice before now in the Guadalupe Mountains which have been botanized by numerous botanists through the years. Several old plants, some 15 feet high or more, are scattered in the open scrub forest and chaparral.

ANENOME EDWARDSIANA Tharp var. **petraea** Correll, var. nov. Varietas *petraea* habitu cum var. *edwardsiana* congruens sed receptaculis et acheniis omino glabris et vernicosis.

In habit similar to var. *edwardsiana* but with completely glabrous and vernicose achenes and receptacle. The plants grow so tightly embedded in rock crevices that it is almost impossible to obtain rootstocks.

Kendall Co., in crevices of boulders in canyon below falls, Edge Falls, between Kendalia and Bergheim, Mar. 31, 1965, *D. C. Correll & Helen B. Correll 30743* (holotype, LL); in crevices of ledges near Edge Falls, along Curry Creek, 5 miles south of Kendalia, April 14, 1964, *D. S. Correll 29141*.

Anemone edwardsiana is apparently an endemic species on the Edwards Plateau and is not referable to the Coloradan *A. tuberosa* Rydb. where some recent authors have tended to place it.

RANUNCULUS SARDOUS Crantz, Stirp. Austr. ed. 1 fasc. 2. 84. 1763.

Panola Co., grassy soil, small lake on Alexander Ranch about 4 miles north of Deadwood, flowers yellow, May 9, 1962, *D. S. Correll & E. C. Ogden 25188*.

This is apparently the first report of this Old World species in Texas. Lyman Benson kindly identified this collection.

CRATAEGUS PEARSONII Ashe, Jour. Elisha Mitchell Sci. Soc. 17:10. 1900.

Jasper Co., south of Jasper off highway 96 between road to Magnolia Springs and road to Roganville, east side of road in woodlands, small trees, Apr. 14, 1963. *D. S. Correll & Helen B. Correll 27231;* about 7 miles south of Jasper, pine-hardwood forest on Kirbyville road, small tree about 15 ft. tall, flowers white, Apr. 10, 1964, *D. S. Correll & Helen B. Correll 29109;* in mixed forest south of Jasper, tree 15 ft. high, 3 in. in diameter, Apr. 15, 1942, *C. L. Lundell & Amelia A. Lundell 11191;* in high forest south of Jasper, armed shrub 10 ft. tall, Sept. 9, 1942, *C. L. Lundell & S. W. Geiser 11819, 11823*.

This species of hawthorn is new to Texas. It has heretofore been known to occur in Mississippi and Louisiana. It is one of the most distinctive species in this extremely complex genus, and it is the only representative of Series Flavae in our region. This Series is characterized by the conspicuous glands of the inflorescence and on the leaf-teeth and petioles. The mature leaves are also characteristic in having a broad subtruncated apex.

Cornus racemosa Lam., Encycl. 2:116. 1786.

Bowie Co., in wooded seepage, along McKiney Bayou, on Summerhill Road #1397, 6.5 miles north of Texarkana, fruits green, pith brown, Aug. 14, 1966, *D. S. Correll 33420;* same locality, fruits white, pith white, *D. S. Correll 33419;* same locality, small trees to 12 ft. high, fruits white, pith white, Aug. 30, 1966, *D. S. Correll 33587.* Cass Co., edge of low forest, about 1.5 miles east of McLeod, small tree to 9 ft. tall, pith dull white, Sept. 14, 1964, *D. S. Correll 30097.*

This species of dogwood is new to Texas. There are several small colonies in the northeast counties noted above.

Nama dichotomum (R. & P.) Choisy in DC., Prodr. 10:182. 1846.

Jeff Davis Co., in gravelly bare soil near summit of Mt. Livermore, Davis Mts., flowers pale lavender, Sept. 20, 1966, *D. S. Correll 33744.*

According to Lincoln Constance, who kindly contributed a treatment of the Hydrophyllaceae to our MANUAL, this is apparently the first report of this species from Texas.

Proboscidea crassibracteata Correll, sp. nov. Herba annua, ampla, procumbens, ad 1.5 dm lata et ad 5 dm alta, omino glanduloso-pubescens; caulis crassus et gravis; folia petiolis gracilibus ad 2.5 dm vel pluribus longis, late triangulo-ovata vel suborbiculato-ovata, cordata, rotundata vel ad apicem obtusa, ad 1.5 dm vel plura longa, longitudo foliorum latitudinem aequans, margine grosse sinuato; flores plures, in racemo brevi gracili ad 10 cm longo prodientes; racemus foliis brevior; pedicelli aliquantum crassi, 2–3 cm longi; bracteae 2, ovato-ellipticae in circumstriptione, obtusae, conspicue carnoso-crassae, circa 8 mm longae et 3.5 mm latae, 2 mm crassae, concavae; calyx tenui-herbaceus, circa 1.5 cm longus, ad apicem irregulatim 5-lobatus, ad basim ventraliter fissus; corolla tubulari-campanulata, non nisi leviter ventricosa; corollae tubus roseus, circa 4 mm supra basim constrictus, extra sparsim pilosus, circa 2.5 cm longus, orificio 1–1.5 cm lato; faux secus medium lineis paucis croceis et ad ostium pilis brevibus articulatis; corollae lobi 5, subaequales, semiorbiculares, late rotundati, sinibus angustis 4–5 mm profundis, lobo medio luteolo circa 2 cm late ubi expanso; capsulae corpus ellipsoideum, ventrali valde carinatum, 8–9 cm longum, circa 2 cm latum, supra in cornu validum arcuatum, longitudine corporis duplo longius protractum.

Plants large, annual, sprawling, as much as 1.5 m across and up to 5 dm high, the herbage glandular-pubescent throughout; stem thick and

heavy; leaves with slender petioles up to 2.5 dm long or more, broadly triangular-ovate to suborbicular-ovate, cordate, rounded to obtuse at apex, up to 1.5 dm long or more, about as wide as long, the margins coarsely sinuate; flowers several, borne in a short slender raceme up to 10 cm long that is overtopped by the leaves; pedicels rather stout, 2–3 cm long; bracts 2, ovate-elliptic in outline, obtuse, conspicuously fleshy-thickened, about 8 mm long and 3.5 mm wide, 2 mm thick, concave so as to conform with the calyx; calyx thin-herbaceous, about 1.5 cm long, irregularly 5-lobed at apex, ventrally split to the base; corolla tubular-campanulate, only slightly ventricose; corolla-tube noticeably constricted about 4 mm. above base, pink, sparsely pilose without, about 2.5 cm long, 1–1.5 cm wide across orifice, the throat with a few yellow lines along the middle and some short articulate hairs at its mouth; corolla–lobes 5, subequal, semiorbicular, broadly rounded, the narrow sinuses 4–5 mm deep, the middle lower lobe yellowish, about 2 cm across the lobes when spread out; frut-body ellipsoid, strongly keeled on the ventral side, 8–9 cm long, about 2 cm thick, tapered above into a stout curved horn that is about twice as long as the body.

Presidio Co., on clay flats near Adobes, Rte. No. 170, flowers pink, with yellow line in throat, Sept. 25, 1966, *D. S. Correll 33900* (holotype, LL).

Galium frankliniensis Correll, sp. nov. Planta omnino dense hispidula; caules principales e base densa lignea et saepe cum caule prostrato ligneo cortice brunneola; caules aerii manifeste 4-angulati, plerumque porcato-erecti vel ascendentes, ad 3 dm alti; folia 4 in verticillum, sessilia, elliptica vel elliptico-oblanceolata, obtusa vel acuta et ad apicem cuspidata, ad 8 mm longa et 3 mm lata, marginibus aliquantum revolutis, costa aliquantum carinata infra medium infra; flores perfecti, quasi sessiles, raro pedunculo brevi nudo, plerumque in ramis brevissimis inflorescentiam ramorum compactorum supra partem foliaceam caulis extensorum facientes; corolla plerumque brunneo-violacea, circa 1.5 mm lata; fructus pilis rectis albis dense velati diametrum fructus aequantibus.

Plant densely hispidulous throughout; main stems from a heavy woody base and often with a prostrate woody stem with brownish bark; aerial stems prominently 4-angled, usually rigidly erect or ascending, up to 3 dm high; leaves in whorls of 4, sessile, elliptic to elliptic-oblanceolate, obtuse to acute and cuspidate at apex, up to 8 mm long and 3 mm wide, the margins somewhat revolute, the central vein somewhat keeled below the middle on the lower surface; flowers perfect, sessile or essentially so, rarely on a short naked peduncle, usually on very short branches to form an inflorescence of compact branches that stand rigidly above the leafy portion of stem; corolla mostly brownish purple, about 1.5 mm across; fruits densely covered with straight whitish hairs that are about as long as the diameter of the fruit.

El Paso Co., rock crevices, McKelligon Canyon, Franklin Mts., near

El Paso, flowers brown-purple, Aug. 13, 1946, *D. S. Correll 13837* (holotype, SMU); rare perennial in sandstone ledges of McKelligon Canyon, Franklin Mts., July 16, 1949, *B. L. Turner 1286* (SMU); infrequent perennial on east lower limestone slopes of Franklin Mts., El Paso, Apr. 19, 1952, *B. H. Warnock 10422;* infrequent low herb, limestone soil, east lower slope along the arroyos of the Franklin Mts., about 7 miles from El Paso toward the White Sands, Sept. 29, 1956, *B. H. Warnock 14291*.

Lauramay T. Dempster, of the University of California, was kind enough to examine these specimens, and, as she pointed out, they are most closely related to *G. parishii* H. & H., of California and Nevada. The hispidulous indument and elliptic to elliptic-oblanceolate leaves of *G. frankliniensis* are quite different from that species.

Spermacoce floridana Urban, Symb. Antill. 7:550. 1913. *Spermacoce portoricensis* A. Gray, Syn. Fl. 1, pt. 2. 34. 1884; Small, Fl. Southeast. U. S. 1117. 1903, *non* Balb.

Cameron Co., in Palm Grove, Mar. 9, 1942, *C. L. Lundell 10645* (LL, TEX); July 1942, *A. M. Davis s.n.* (TEX).

This species, which heretofore has been known from Florida and the West Indies, is new to Texas. It differs from *S. tenuior* L., its nearest ally in Texas, in that its corolla is essentially glabrous within instead of being noticeably pubescent, and its subglobose glabrous fruit is 1–1.5 mm long in contrast to the didymous-obovoid mostly puberulent fruit of *S. tenuior* which is 2–2.5 mm long.

Texas Research Foundation, Renner

NOTES AND NEWS

Library Mailing Rates for Herbarium Specimens.— Congress, in its recently passed postal bill, enlarged the concept of library mailing rates to include herbarium specimens as well as other kinds of systematic collections (Sect. 135.14, *Postal Manual*). Specimens sent at library rates must be addressed to an institution, not to an individual, but the package may be marked to the attention of an individual at an institution. Packages cannot exceed 70 pounds each nor a length plus girth of more than 72 inches. In view of the low cost of sending herbarium specimens at this rate, I suggest that we send domestic loans prepaid. It will save us all money in the long run.—John H. Thomas, Dudley Herbarium, Stanford University.